

# Re:Port

Vol. 3, Issue 1

The Independent Newsletter for Portfolio Users

Jan/Feb, 1994

## Stop dreaming and just do it

### Upgrade Guide for Port shows you how it works

Does your Portfolio wish list include more memory, a faster processor and better power management? If so, your wishes have come true.

German Portfolio user Stefan Kachele has created a do-it-yourself manual that address those wishes. Re:Port will publish the English version of the manual (translated by subscriber Wolf-Theo Holl).

The manual, called the "Port Upgrade Guide" gives full details and schematics on how to get into the Portfolio, make the necessary changes, and more importantly, put it back together again.

One word of caution: The manual is not for anyone who has not worked with electronics before. But the benefits of the upgrades described in the guide pertain to all Portfolio users. You may wish to give the manual to someone who know who is technically inclined, and have them upgrade your Port for you.

The Port Upgrade Guide will begin shipping on Feb. 14, 1994.

Re:Port is the exclusive North American distributor for the English version of this manual.

To order your copy, send check or money order for \$55 (which is \$5 off the \$60 cover price) to:

Port Upgrade Guide  
Re:Port  
PO Box 95691  
Atlanta, GA 30347

As always, shipping is free via parcel post.

The manual will begin shipping on Feb. 14, 1994. The normal price for the manual is \$60, but Re:Port subscribers will of course receive a discounted price of \$55.

The Port Upgrade Guide includes five chapters, which tell you:

1. How to upgrade the Port to 224K, 320K or 512K of internal RAM.
2. How to increase the Port's clock

Continued on Page 8

#### What's Inside

- ♦ CD-ROM of Port software available.

Page 3

- ♦ New programming language focuses on handheld development.

Page 4

- ♦ Punk Jr. game is a graphical delight.

Page 5

- ♦ Find the difficult-to-locate piece of information quickly with our new utility.

Page 7

- ♦ Desktop versions of built-in Portfolio programs now available on disk from Re:Port.

Page 8

- ♦ Beginner's column, advanced column, contest winner, and more are all ...

Inside



# From the Editor

## Has Jag's roar deafened Atari to Port pleas?

Atari is on the hunt.

The new Jaguar game system is Atari's way of becoming a predator in the lucrative home video game market again, a market that Atari once owned outright.

The Jaguar so far has shipped to the New York and San Francisco areas, as well as to several hundred direct-order customers nationwide. The rest of the world should see it very soon.

In the excitement to get the critically acclaimed game machine to

market, it seems that Atari may be ignoring the Portfolio.

Atari has not come out with anything new for the Portfolio for months. Several projects that were supposedly in the works, such as Bridge Baron and the Wine Guide, have still not surfaced.

Third-party products such as Optrol's FlashRAM cards have helped to keep the Port alive, and vertical market applications like inventory control and surveying keep the Port a profit area for Atari.

Although Atari continues to sell and support the Portfolio, we can only hope that it continues to create new software as well.

Now that other handhelds are becoming all the rage (witness the public frenzy for the laughable Apple Newton), Atari can find out easily what the public wants (remote fax, remote email, city guides, "intelligent agents" and the like) and create those same pieces as add-on software for its excellent Personal Digital Assistant.

## Memory Tip

### Careful CONFIG.SYS use can add several kilobytes

Squeezing the most memory out of your Portfolio can sometimes seem like a lost cause.

But there is one more place to look after you think you've found every last ounce of memory on your Portfolio: Your CONFIG.SYS file.

If you don't have a CONFIG.SYS file, the Port will automatically use a specific amount of memory for "files" and "buffers," two built-in variables that tell DOS how many files to open and how much memory to use during disk reads and writes.

The default amount that the Port is using may be too much for your own good.

On a Port with an 8K C: drive and no CONFIG.SYS file (and no other programs running), the Port has 104736 bytes free.

However, if you add a CONFIG.SYS file with the following lines:

```
FILES=9
BUFFERS=1
```

you will see that the Port now has 106256 bytes of memory, or 1520 extra bytes. That's almost 1.5K of memory that was basically wasted before.

That's because the Port assigns about 10 files and 5 buffers if there is no CONFIG.SYS file to tell it otherwise.

You may think, "I can lower the numbers even further to get more memory than that!" Actually, that's not quite true.

"Files=9, Buffers=1" seems to be about the limit here. Any lower, and the Port will either say that it doesn't

recognize the commands in CONFIG.SYS, or your memory will show some smaller amount, like 88K rather than 104K.

What are the effects of files and buffers, anyway?

"Files" tells the computer how many files can be open at once. If you have any programs that need to keep more than nine files open at the same time, you won't be able to use this trick. However, few Port programs use more than two or three.

"Buffers" is the number of areas of memory that the Port can use to speed up disk reads and writes. Because the Port is either writing to its own memory or to a RAM card's memory (and not a physical, rotating disk), having a high number of buffers doesn't help speed the process up much.



# Industry News

## Port files playing on CD-ROM; Germany hot

### NO MORE SMALL CASES

Atari has run out of the smaller "pouch" cases for the Atari Portfolio.

Still available is the much more roomy "Professional Carrying Case" (Retail, \$49.95; Re:Port, \$40.96).

The pouch case would hold the Portfolio and several RAM cards, along with a detached parallel or serial interface (although it was a tight squeeze).

The Pro Case will hold a Portfolio with an attached parallel or serial interface, three spare AA batteries, five RAM cards, and program documentation.

### PORT FILES ON CD

A new CD-ROM, the Walnut Creek GEMini Atari CD-ROM, is now available. Although it contains software for other Atari computers, it does have a wealth of files and programs that make it a great value to anyone with a Portfolio.

The CD-ROM is available bundled with either a Falcon030 Photo-CD viewer (\$39.95), VIEW II or Abbreviator ST (\$44.95) from:

Randall Kopchak  
It's All Relative Software  
2233 Keeven Lane  
Florissant, MO 63031

Because the CD-ROM is in ISO 9660 format it is readable by a PC with a CD-ROM drive or an Atari with a CD-ROM drive.

You'll need to copy the files from the CD-ROM drive to your Portfolio, just as you copy files from your Re:Port disks.

The CD contains about 980 files for the Portfolio, which comes to about four cents per file.

In those 980 files, you'll find almost every utility and program that is available as either freeware or shareware for the Port, so the CD is a good way to round out your collection.

However, many of the files are quite old, and there is some unnecessary padding.

For example, there are five versions of BJ Gleason's outstanding PBASIC on the CD, but not the most recent version.

To see for yourself, the list of all Port-related files on the CD is available on Re:Port Disk #13.



The complete list of Portfolio files on the new Walnut Creek CD-ROM can be found on Re:Port disk #13 in the \CD directory

### GERMANY GOES PORTABLE

Germany has become a recent hot spot for home-grown Portfolio items. A German team created and translated the "Port Upgrade Guide" (see page 1). And other products are surfacing over there all the time.

For example, a German engineer is working on a 384K RAM card that will include batteries that recharge themselves whenever the card is inserted into the Port. His unique design uses external switches to change between three banks of 128K chips. In other words, the card stores 384K of information, but you can access only one 128K chunk of it at a time.

For example, you could store PBASIC and its programs on one 128K section, your address book and dairy files on another 128K section, and your editor files and .HOO programs on the third 128K part. The Port's ability to cut and paste between internal applications would mean that you could still transfer data from one section of the card to another.

This sort of switching scheme was necessary to keep the price low, around 150 to 200 DM (or \$86 to \$115 US, according to Associated Press price quotes for the end of January).

Re:Port will obtain some samples of the cards when they are available, and will run a full review at that time.

Our German readers may be interested in keeping up with Portfolio activity through the new "Pofo Club."

The club features a newsletter, which is written entirely in German. For more information, write to:

Lars Aschenbach  
Stueckenstr. 55c  
22081 Hamburg  
040/2993031

Reach Port owners with an entry in Industry News! Send your press release to:

Re:Port Industry News / PO Box 95691 / Atlanta, GA 30347



# Programming

## New TIPI language finds its home on the Port

By Kent Peterson

TIPI is a new programming language that was created specifically for palmtop programming.

I created TIPI because I wanted to be able to program anytime and anywhere.

I didn't want my programing environment to fill my computer. I wanted to have space left to use my Portfolio for storing appointments, documents and programs.

Plus, I wanted to have a programming language that could include some of the neat features I've come across in the various programming languages I've used over the years.

TIPI is an acronym standing for "Threaded Instruction Processing Interpreter."

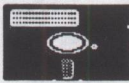
Unlike a compiler, an interpreter doesn't need to compile and link your code in order to run it.

An interpreter interprets the code as it runs.

In TIPI's case it looks up each instruction as it encounters it in an internal structure known as a threaded dictionary.

The process is reasonably fast and quite compact.

In fact, the entire TIPI interpreter fits into a compacted .COM file that is less than 10 kilobytes long!



TIPI is in the \TIPI subdirectory on Re:Port Disk #13

### ON DISK

The language is shareware, which means that the author requests payment for your continued use of the program. To register, send \$25 (U.S. currency only) to:

**Kent Peterson**  
360 NW Dogwood #A-201  
Issaquah, WA 98027-3272

TIPI borrows many of its concepts from Forth, a powerful but cryptic language invented by a genius named Charles Moore.

In creating TIPI, I tried to keep some of the best ideas from Forth while creating a language that would be more accessible to programmers familiar with other languages such as BASIC, C or Pascal.

Like Forth, TIPI is an extensible language.

While most conventional languages make you cast your problem in the commands of the language, TIPI allows you to mold the language to fit the problem at hand.

You can add new instructions to TIPI and use them just like the built-in TIPI instructions.

TIPI is a structured language.

TIPI's looping structures include DO..LOOP, BEGIN..UNTIL, and WHILE..WEND.

The control structures include IF..THEN..ELSE, CASE and CASE\$ statements.

Because TIPI is structured, the one instruction you won't find in the language is the GOTO.

You just can't write spaghetti-code with TIPI!

The TIPI also comes with a built-in debugger and the TIPI Programmer's Workbench.

The Workbench lets you edit, run and debug your code on the Portfolio or a desktop PC.

The Workbench also includes a Portfolio Address Book file summarizing all of the built-in TIPI instructions.

TIPI comes with some fun sample programs including a version of Hangman and a frustratingly addictive puzzle game.

TIPI also comes with a 43-page manual describing the language.

This issue's Re:Port disk contains the full TIPI 1.0 package.

TIPI is shareware, and if you use and like this software, you are expected to register it.

The registration cost is \$25. See the on-disk documentation for more details.

Have fun and enjoy TIPI.

*Buy it,  
Sell it,  
Trade it*

Re:Port's Classified ad section is a great place to contact other Portfolio users when you want to buy a used part, sell an old system, or trade a ROM card or two.

### Affordable Rates

25 words or less .....	\$3.50
26 to 50 words .....	\$5.00
51 to 100 words .....	\$7.00



# Game

## Punk Jr. sets standard for Port graphics

By Robert Quezada

Punk Jr. is an entertaining "Pac Man" clone for the Portfolio that far exceeds the graphics and playability of other Port games.

### OBJECT

The object of this game is simple: eat all the dots in each maze. However, you must also avoid getting eaten by the ghosts.

Because you are all in a maze, the ghosts will not be able to see you as you see them from your view.

This might seem to make the game too easy, but that's not all.

The ghosts move slightly faster than you do and they will catch up to you in a chase (even through tunnels), but when you eat an energy square, you then have the speed advantage.

There are tunnels on the sides of the board, and occasionally either on the top or the bottom.

### ENERGY SQUARE

The energy square is a tool that shrinks the ghosts to a size that allows you to eat them.

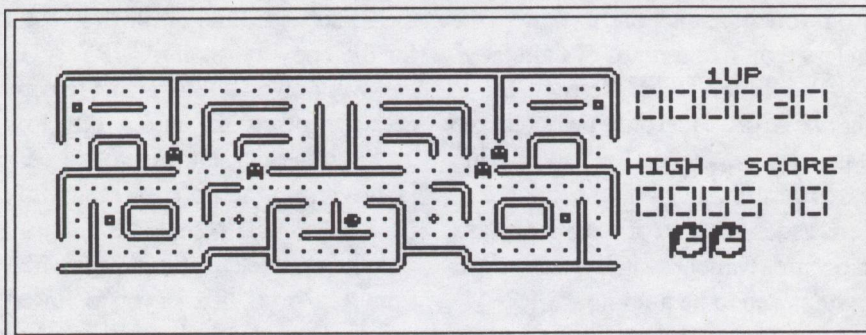
This does not last too long; they will grow back to normal size after a while.

### NEW GHOSTS

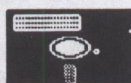
Unlike other "Pac" clones, the ghosts' eyes do not run around the maze until they return to the ghost hole for a new sheet.

An eaten ghost is replaced with a clone that is formed molecularly in the ghost chamber reactor (which in everyday English is the ghost starting position).

After the ghost reforms, it resumes its journey through the maze



The Punkman Jr. playing screen shows the maze and game info.



### ON DISK

Punk Jr. is in the VPUNKJR subdirectory on Re:Port Disk #13

The game is shareware, which means that the author requests payment for your continued use of the program. To register, send \$5 (U.S. currency only) to:

**Robert Quezada**  
301 Stillwells Corner Rd.  
Freehold, NJ 07728

hunting for you.

### SCORING

50 points for Energy Square

10 points for each dot

200 for 1st ghost eaten

400 for 2nd

600 for 3rd

800 for 4th

Extra Punkman given at 10,000 points.

### CONTROLS

For English and German keyboards:

Up: 'W'

Down: 'X'

Left: 'A'

Right: 'D'

For French keyboards, 'Z' is the

"up" key.

Sound is toggled off/on with Control-S.

ESC key will end the game and return you to the DOS prompt.

### EXTRA NOTES

Do not use "Atari key" combinations to jump to other programs while playing because it will cause the board to disappear.

### OTHER PROGRAM INFO

This program is shareware. That means that you may copy and distribute this freely to any one or any computer network system, but anyone who gets a copy should register the program.

If you like this game, you are encouraged to register the program for \$5 (U.S. currency only).

You will then receive a board designer program that will allow you to play custom boards or change the original boards.

For those outside the U.S., please add enough for additional postage.

### REQUIREMENTS

The PORTGR.EXE file is the graphics driver file and must be run only once per reset.

I found out that for best results,

**Continued on Page 8**



# Mailbox

Continued from Page 12

**Re:Port,**

Sad to say, a 64K Card I bought from you in January had its battery die in less than five months of light use.

Also, I found that "Copy A: B:" in the one A: drive just didn't work for me when I tried the dodge for copying cards described in Volume 2, Issue 6.

Besides, doesn't it assume swapping cards without switching off, which is supposed to be a no-no?

Another supposed no-no — rechargeable batteries — has now been working for me for four months, more reliably in every way than Duracells, except that battery life is at best half the usual and may be going down before I recover my initial investment!

— *Parig Digan*  
*England*

**[Editor's Reply:** I've heard of battery life range from a single month to several years. The deciding factor seems to be whether the card is left plugged into the Portfolio all the time (in which case, it draws power from the Port), or is left out of the computer most of the time (in which case, the battery is drained more quickly).

There is also the possibility that the battery was already beginning to get stale before it was even put into the RAM card.

In any case, five months is certainly too short a period for the battery to last. The randomness of battery life on memory cards makes a good case for frequent backups!

The COPY A: B: trick does work, but it is a painful process, and we did leave out an important bit of the command. (For those who missed it last time, the trick was to copy all of the files from one RAM card directly to

another with one command.)

The part we left out was that you must use some kind of file designator for the copy; normally COPY A: B: will work on a DOS machine to copy everything from the current directory in A: to the current directory in B:. However, on the Port, you must say COPY A:.\* B: to copy all files.

When you tell the Port to copy files from A:.\* to B:, it asks you to "Insert disk for Drive B: Strike any key when ready ..." At this point, you should remove the first RAM card and insert the second card. Then, the Port will ask for the first card again, and repeat the process until all files are copied. What you'll find, though, is that you'll end up swapping cards so many times that you may lose track!

A far more worthwhile method, although it takes more commands, is this: Resize your C: drive to 80K (assuming that there is nothing on the C: drive that you wish to save). Copy all the files that will fit from Drive A: to Drive C:. Then, insert your second RAM card and copy files from Drive C: to Drive A:. Repeat this until you have copied all files.

That method sounds like more work, but actually means you'll only switch cards out at most twice for a full 128K card, whereas the other method takes three swaps for each file that you wish to copy!

Pulling cards out while the Port is on is actually no better or worse than pulling them out when the Port is off. It all depends on what the Port is doing when the card is pulled out.

It is always OK to take the card out of the Portfolio when you are at a DOS prompt and no other programs are running, whether the screen is on or

off.

However, you can damage the data on the card if you pull the card out while the Port is running a program, no matter if the Port is on or off. The danger is that a program will have a file on the card in an "open" state, perhaps to write information to it. When a RAM card with an open file is removed, its data can be corrupted.

Even if you turn the Port off first, if there are still open files on the card, you run the risk of losing some data.

To be as safe as possible, always exit to DOS and turn the Port off before removing the card. However, it is considered safe to remove the card at the DOS prompt without turning the Port off.

Reports from people using rechargeable batteries have always been varied.

Rechargeables are not strictly a "no-no," but rather just not compliant with the Port's battery monitoring ability. The Portfolio was designed to flash up a "low battery error," which I'm sure every Port owner has seen, as soon as it detects that battery power is beginning to wane. But this detection is based on the way that normal AA batteries discharge (in a slow curve down).

Rechargeable batteries usually maintain a steady charge, then lose power in a sharp drop.

The Port won't report the low battery status until that sharp drop has started, which may not be enough warning.

If you're conscientious about your recharging and you have a feel for how long a charge will last, you should be able to use rechargeables in your Port just fine.]



# Featured Program

## Find anything on your Port in a flash

The Port can be a great organization tool. However, in the rush to get information into the computer, you may have trouble remembering where you put it later.

That's where this month's utility, FIND, comes in.

To use the program, copy FIND.EXE from your Re:Port disk onto your Port.

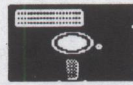
Then, simply type FIND <enter>.

FIND will ask you what files you want to search (the default is \*.\* , or all files). Here, type in a particular set of files that you want to include, such as \*.ADR for all address books, or LETTER\*.\* for any letter file that you've written.

The next line asks you what you want the file to contain. This can be any string of letters or numbers, or you can leave the field blank.

The search is case-sensitive, which means searching for "Portfolio" is different from searching for "portfolio." The first would find any reference to the computer, and the second may find references to your finances.

If you leave the "containing" field



FIND.EXE can be found in the \FIND subdirectory of Re:Port Disk #13

blank, FIND will just list the files that match the search pattern that you typed in.

Now, a list of files (if any) that match your search will be displayed, along with the number of references in the file that match your request.

At this point, you can scroll up and down through the list of files using the arrow keys.

Perhaps most importantly, you can view the files in their native formats with FIND. Let's say that you did a search for any file containing "Smith" and found five files:

PROJECT.WKS  
CLIENTS.ADR  
LETTER1.TXT  
LETTER2.DOC  
DIARY.DRY

If you wish to view the file CLIENTS.ADR, just scroll the list so that the file appears at the top. Then, press Atari-A, and the address

book will load along with CLIENTS.ADR.

In this example, you would press Atari-W for PROJECT.WKS and Atari-D for DIARY.DRY. Any other file (for example, both LETTER files) will load in if you press Atari-E.

FIND will reset the default files to what they were before you began, so you can always return to your work when you're done viewing files.

If you were working on LETTER1.TXT in the Editor before you began FIND, and pulled several files into the Editor while the program was running, then LETTER1.TXT will appear again in the Editor the next time you run it outside of FIND.

If you want to start another search, press the TAB key (on the Port keyboard, TAB is on the far left, indicated by two arrows pointing left and right).

To make FIND even easier to use, you can specify the search pattern from the command line. For instance, to find all Address Book files with the name Smith in them, type FIND \*.adr Smith <enter>.

## Get a date without work in the Worksheet

One of the most common questions about the Worksheet application is, "How do I put today's date in my sheet?"

Although it is not obvious how to put the current date into a spreadsheet, it is not really difficult to do.

The key is the function called

@TODAY, which produces a large number that represents the number of days that have passed from December 30, 1899, to the current system date.

Of course, this number is mostly useless to a human. However, three other functions take care of that. Try

inserting @DAY(@TODAY) in your sheet, along with @MONTH(TODAY) and @YEAR(TODAY).

With these functions, your worksheet will be able to include the current date, updated whenever the sheet is loaded or recalculated.



# PC Compatibility

## Desktop versions of Port's programs available

Wouldn't it be great to have the same programs that are built-in on the Port available to you on your desktop PC?

Well, they are, and Re:Port can get them to you. Written by DIP, the original designers of the Portfolio, the desktop applications are almost exactly the same.

The biggest difference is that you can change the size of the application screen, which is a boon to the Editor and Worksheet programs in particular.

The programs look, act, and feel exactly like they do on the Portfolio otherwise. The disk they are on includes software to transfer the data

back and forth through the Parallel Interface, but of course the PC Card Drive is the way to go for easy data transport.

The Desktop Applications Disk is available from Re:Port for \$125 US. To order, send check or money order to: Re:Port / PO Box 95691 / Atlanta, GA 30347.

# Upgrade Guide

Continued from Page 1

speed from 4.9MHz to 6.5MHz.

3. How to increase the internal backup power (without batteries) to more than 48 hours.

4. How to use the parallel interface and PBASIC as an I/O interface.

5. How to obtain the necessary parts for the upgrades.

The manual includes two pictures of the insides of the Portfolio, so if you've ever wondered what was in-

side but were too afraid to look, this is your chance. And after reading the manual, you may be prepared to take a look for yourself.

The Port Upgrade Guide is definitely a testament to what can be done with a some ingenuity, patience, and a desire to improve the Portfolio. The author includes detailed instructions and words of caution so you don't "damage a series of Ports like I did at

the beginning of my upgrade work." He has done the difficult trial-and-error work already, so you don't have to.

The author is still hard at work with other Portfolio upgrades for the future, including a backlight for the Port's screen, and some hardware for exact temperature measurement. We'll let you know when he succeeds in those areas.

# Punk Jr.

Continued from Page 5

call the program in your AUTOEXEC.BAT file, so it is called every time you reset your Portfolio.

If you run the PUNKMAN.EXE file without having loaded the graphics driver file program previously, the program will freeze and lock up the Portfolio. Just remove power for a short time, or hit the reset button to reset.

All included files (except for

PORTGR.EXE) must be in the same directory for this game to work. You must have at least 64K of free memory available before running this program.

**IMPORTANT:** If running this game from a memory card, ensure that the write protect switch is in the off position before running.

Nothing harmful will happen to your system if you run the

PORTGR.EXE file more than once per reset. All that will happen is that less memory will be available each time.

## BRIEF DESCRIPTION

Punkman Jr. was written using Turbo Pascal 6 on an IBM PC 386 clone.

PKLITE was used to compress the file from about 27K down to its current size.



# Beginner's Column

## Knowledge of Portfolio batteries is power

One of the constant worries for Portfolio users is, "When will my batteries run out?"

Your Port depends on three different types of batteries: The three AA batteries that provide main power, an internal lithium cell that provides backup power, and a lithium cell in RAM cards that retains card memory.

The main batteries are fairly easy to gauge, because you'll get a "Low Battery" warning when they are about to fail.

However, the estimates on battery life for the main power varies greatly, depending on a variety of things.

The main drain on batteries comes from using a serial or parallel interface while under battery power.

You should always try to use an AC adapter when using the serial or parallel interfaces.

After that, batteries are drained by the screen, sound, and the keyboard.

You may find that you can prolong battery life by "muting" the Port (by selecting Atari-S for Setup, then Sounds, then Mute Toggle).

Screen and keyboard power is lowered when the Port goes into "sleep" mode by itself or when you turn it off.

There is very little you can do about the lithium cell inside the Portfolio.

It provides a short burst of power for the Port's internal memory to give you enough time (not safely more than 15 minutes) to remove

low-power AA batteries and replace them with fresh ones.

Once the internal charge wears down, your C: drive data will be lost.

When you do insert new batteries, the Port stops using the internal cell and starts recharging it for next time.

Unless you're an engineer and you're not worried about voiding your warranty, don't open the Port to fiddle with the internal battery.

If you are interested in finding out how to increase your Port's internal battery life (for instance, if you often are using your Port in remote areas and may not have access to spare batteries), the Portfolio Upgrade Guide (see Page 1) can help you.

It includes a chapter on increasing the Port's internal backup power to 48 hours or more, keeping your data safe during two days away from civilization.

The batteries inside your RAM cards can be worrisome.

There is no "low battery warning" for them. There is really no telling how long they will last, either.

The official documentation from Atari says the batteries will last two years in a 32K card and one year in either a 64K card or a 128K card.

However, like the Port's internal battery, the RAM card battery is only in use when it is outside of the Port or otherwise can't get power from the main AA batteries or an AC adapter.

When the card is inserted into the Port (even if the Port is turned off), the battery is no longer in use, so

battery life can be extended far beyond one or two years if you just use a single RAM card and keep it inserted most of the time.

To be safe, you should always change your batteries at least once a year.

The replacement battery is called a CR-2016, and can be found at any Radio Shack or similar store for around \$3 US.

Changing the RAM card's battery can be tricky, but it is not especially difficult.

If at all possible, you should back up the data on the card before you install a new battery.

To put a new battery in, you should insert your card into your Port.

Then, you can remove the battery holder, which is a small groove on the exposed end of the card.

Remove the old battery. Insert the new battery into the holder and replace the entire assembly back into the card.

At this point, the only way to test your work is to pull the card out of the Port, leave it out for a minute or two, and then put it back in.

If you can still access drive A:, you're in business.

If not, then you will need to try again and also restore your backed up data onto the card.

If you're truly worried about RAM card batteries, a good choice would be the Optrol FlashRAM cards, which can retain data for up to 10 years without any kind of battery power.



# Advanced Programming

## Scrolling techniques make most of screen

Arranging information on the Port's screen is important to programmers.

Obviously, you don't have a lot of room to display characters, so you need to make the most of that 40 by 8 screen.

Careful planning using graph paper or a word processor to design screens will make the process faster. There are also some scrolling techniques that you can use to keep information that goes together grouped together on the screen.

Probably the most direct way to create a scrollable "window" on the Port's screen is to do it the same way you would in DOS.

Functions 6 and 7 of Interrupt 10H work on the Port as they do on any DOS machine, and they make creating a scrollable window simple.

Function 6 shifts a block on the screen up a certain number of lines, allowing you to insert new text below it (this is the way you'd scroll a window when the user presses the down arrow key).

Function 7 shifts a block on the screen down a certain number of lines, allowing you to insert new text above it (this is the way you'd scroll a window when the user presses the up arrow key).

The functions take the following arguments:

Number of screen lines to move the block of text (in AL).

X and Y coordinates of the top of the block to move (in CL and CH).

X and Y coordinates of the bottom of the block to move (in DL and



DH).

The attribute of the text to use on the blank lines that are uncovered by the function (on the Port, always use the attribute 07 in BH).

In assembly language, a call to function 6 to move the entire Port screen up one line would look like this:

```
MOV AH,06
MOV AL,01
MOV BH,07
MOV CL,00
MOV CH,00
MOV DL,39
MOV DH,7
INT 10H
```

After that function call, you can write to the last line of the screen, and it will appear to the user that the text was "scrolled."

Other techniques are available as well.

To scroll the screen vertically, you can use not only the method above, but also the Port's built-in Menu Box (see EDITBX.PAS in the \SOURCE directory).

You can build a Menu Box, fill it with whatever text you want, and let the Port take care of the scrolling necessary when the user presses the up and down arrows.

This has the advantage of being

simple and taking up very little programming space and memory.

However, this comes with a loss of control. Should you need to change the contents of the Menu Box, you will need to find a way to exit the box and redraw it. Also, there is no easy way to allow horizontal scrolling if you should need it.

We've talked before about the Port's built-in Edit Boxes, and even provided some Pascal source code for using them.

One good thing about the edit boxes is that they allow the user's text input to be scrolled horizontally.

This means that you do not have to provide enough space on the Port's limited screen to allow the full amount of text to be input. Rather, allow enough space to be reasonable (usually half of the total length of the string to be input is sufficient).

When the user goes to enter the information for this block, the text will begin to scroll before it reaches the end of the on-screen space allowed for it. The rest of your screen will stay put, and when the user presses enter, the first portion of the string will be displayed in the space available.

Of course, the entire string will be accessible to your program.

This technique makes for powerful data-entry screen formats on the Portfolio, and is part of the engine that drives the built-in Editor program.



# Online Services

## CompuServe sees debates; GENie stirs

In the last issue, we noted that CompuServe's APORTFOLIO forum, a section devoted solely to the Port, had been integrated into the more general PALM-TOP forum.

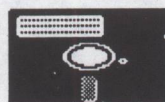
The move has prompted some complaints from users who are particularly upset about the arrangements of the files in the libraries.

Formerly, all of the Atari Portfolio files available for downloading were separated into several categories, making it easier to find a game, or a utility, or a text file.

Now, all Port files can be found in a single directory in the palmtop forum, which makes finding the type of file you are looking for slightly more challenging, but not impossible.

Most files on CompuServe have one or several keywords that describe it. These keywords are created by whoever put the file on CompuServe, so they aren't standard by any means. But a close guess will usually pull up most of the files that apply.

For instance, to find all Port graphic files, use the keyword GRAPHIC, and you'll get a list of the appli-



**ON DISK**

Catalogs of the new files available on CompuServe and GENie are available on your Re:Port Disk #12 in the \ONLINE directory.

You can get a sign-up kit and \$15 worth of free connect time on CompuServe by calling (800) 848-8199 (ask for Operator 198). Tell them that you heard about this from Re:Port, a Palmtop forum member.

cable files. (To do this, type BRO KEY:GRAPHIC at the LIB! prompt.)

All public domain files from Re:Port editor David Stewart can be found under the keyword STEWART, or search under the ID of 73770,2021.

GENie, which has been quiet for some time, is beginning to pick up again with more messages from people interested in transferring files to Atari ST computers. And GENie's Portfolio Roundtable (M950) was the first to break the news of the CD-ROM with Portfolio files (see Page 3, Industry News).

# Contest

## Contest winner can get \$5 Re:Port certificate

Re:Port has always given away some good prizes, including a pocket modem, a ROM-card based terminal program, a serial port, a 128K card, to name a few.

We've usually asked for reader response to the form you see to the right, and once we even asked for a solution to a game program included in the newsletter.

But despite the great prizes and easy entry methods, contests have at most generated a response from at most 5 percent of readers. So, for now, we'll still ask you to send in the information form if you wish, because we'd love to hear from you, but we'll open the contest to a random drawing among all subscribers.

This issue's winner is Allan Teplinsky, who gains a \$5 gift certificate toward any Re:Port purchase. Next

### Re:Port Feedback

Name: \_\_\_\_\_

Favorite feature in Re:Port: \_\_\_\_\_

Favorite application (pick two):

Editor	Worksheet	Address Book
Diary	Calculator	

issue, we'll give away another \$5 certificate to a random reader.

If you wish to send a feedback form, please do! Send it to Re:Port / PO Box 95691 / Atlanta, GA 30347.



# Mailbox

**Re:Port,**

It just figures. I get a .5 MB card and then Optrol scoops themselves (sigh).

I'm still looking for a file viewer that will live in less than 60K and "scroll" through any size file. PC software is so fat these days that nobody seems to want to program for a restricted machine. I've tried lots of old programs, but haven't found one yet that works right. Requirements:

- Uses less than 60K of memory
- Is a "disk scroller" that'll page parts of the file in/out
- Has a search function
- Will wordwrap to 38 or 40 columns

Many Port users could use such a program.

— Lee B.

(via GENIE)

**[Editor's Reply:** Yes, Optrol did "scoop" themselves with larger cards, but the 524K card is still very useful, given that it includes a 128K "RAM disk" area that can be put to use effectively to reduce the amount of time spent "cleaning" the FlashRAM card.

As for the file viewer program, I'm afraid I can't think of a single program that handles all of your needs at the moment. Some possibilities, and their drawbacks, include:

**THE BUILT-IN EDITOR:** This can actually be used for a text viewer, but it misses out on your demand that it work as a "disk scroller" to work with any file size. The built-in Editor can use only about 50K of memory to scroll a file back and forth; beyond that, it is useless.

**PREAD:** BJ Gleason's PREAD is perhaps the fastest Port text viewer

program, with two drawbacks when compared with your list: It doesn't disk scroll, and it doesn't do a word wrap (you must word wrap the document yourself before converting to PREAD format).

**LIST:** The desktop PC classic can run on the Port, but not very well. It was meant for an 80 by 25 column format.

Any budding programmers who want to send in a solution are encouraged to make an attempt. This program would definitely benefit the entire Port community.

A prototype program here at Re:Port fits all of the necessary requirements, except that it cheats somewhat on the "disk scrolling" part of the deal. The program won't scroll backward, only forward, similar to the built-in TYPE command, but with more control. We'll try to have it cleaned up for a future issue.]

**Re:Port,**

I just wanted to let the members here know that I'm working on a project with a small religious school that my kids go to.

The goal is to get some computers in the classroom.

Due to a real tight budget I think that the Port would be an excellent choice. So part one of the project is to solicit used (or new) Ports for donation to the school. We are also interested in some RAM cards (any size) and AC adapters. Any (tax deductible) donations would be gratefully received.

We are looking to get at least 3 Ports and some extra RAM cards to hold different subjects.

I will be doing the programming for Port but if you are aware of any educa-

tional software for the Port (pre-school thru 1st grade) let me know.

Besides the actual programming I would also be interested in finding people that are also interested in educational programs for the Port (to share what I'm developing with.) I would also like to find people who would be willing to do some graphics work for some of the programs. This is a bit hard to explain right now since a lot of detail has not been worked out but in generally simple little pictures to help in reading and spelling (you know like A is for Apple type of things.)

Right now my major motivation is to make some of the drill work a little more fun for my kids.

— Barry Childress  
(via CompuServe)

**[Editor's Reply:** I have already suggested to Barry that a tip in Volume 1 of Re:Port could be helpful—use the Address Book as a "flash card" program. Put the questions on the topic line, and the answers on the "card" portion of the screen.

Although this eliminates the need for programming, it doesn't allow for much feedback to children, though. In fact, it is probably a better study aid for higher grades.

A program in PBASIC or TIPI would allow for some necessary touches, such as music when the answer is correct, the ability to hide the answer, the ability to offer multiple choices, and the ability to keep score.

Anyone with donations of hardware or software for the project can get in touch with Re:Port, and we'll direct you to Mr. Childress.]

**Letters continue on page 6**